IN THE CLAIMS

1.   (currently amended)   An information processing apparatus comprising:

receiving means for receiving a stream constructed by packets of a predetermined format under control of a control means;

extracting means for extracting packets ~~for recording to a recording means~~ from the packets constructing said stream received by said receiving means;

memory means for storing said packets for recording;

memory control means for controlling writing ~~and reading~~ said packets ~~of~~ into said memory means, for controlling reading said packets from said memory means, ~~and~~ for issuing a command to prepare transferring before an amount of said packets stored by said memory means reaches a full capacity, and for supplying a start address of the recording means;

index adding means for adding an address of a sector of a minimum unit of recording on the recording means as index to said packets read out by said memory control means and for outputting said packets added said address to said recording means;

arbiter for mediating said packets extracted by said extracting means storing said memory means, and for mediating said packets outputting from said memory means to said index adding means in response to an instruction from said memory control means; and

packets transferring control means for permitting write access of said packets outputted from said index adding means to said recording means in accordance with said command from said memory control means ~~, so that said packets are transferable for recording to said recording means from said index adding means without control of said control means~~, wherein said packets

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transferring control means including address determining means for starting updating an address of said recording means when said start address is inputted from said memory control means by counting up said address of memory means each time transferring said packets of predetermined data amount.

2.   (currently amended) An information processing apparatus according to claim 1,

said memory means includes an input FIFO, and

said transferring of said packets is made cluster by cluster, said cluster being of a predetermined data amount.

3-6.   (canceled)

7.   (previously presented) An information processing apparatus according to claim 1, wherein the recording means is a hard disk drive built in said information processing apparatus.

8.   (withdrawn) An information processing apparatus comprising:

receiving means for receiving a stream constructed by packets of a predetermined format;

extracting means for extracting the packets which are recorded to a recording apparatus from the packets constructing said stream received by said receiving means;

memory means for storing said packets extracted by said extracting means;

a command buffer for setting address information for DMA transfer; and

adding means for adding said set address information every predetermined data amount (block) of the packets read out from said memory means.

9.   (withdrawn)   An information processing apparatus according to claim 8, wherein said adding means adds the address information including at least one of an address in said recording apparatus in which a just-previous block has been recorded, an address in said recording apparatus in which a current block is recorded, and an address in said recording apparatus in which a just-subsequent block is recorded to said block.

10.   (withdrawn)   An information processing apparatus according to claim 8, further comprising updating means for updating said set address information for DMA transfer.

11.   (withdrawn)   An information processing apparatus according to claim 10, wherein said updating means has an internal counter for automatically setting said address information.

12.   (withdrawn)   An information processing apparatus according to claim 11, wherein as said address information, each time the DMA transfer of one block is finished, said internal counter is counted up and the address information of one block is set.

13.   (withdrawn)   An information processing apparatus according to claim 10, wherein said updating means updates said address information for DMA transfer when the data amount of said packets stored by said memory means reaches a predetermined capacity.

14.   (withdrawn)   An information processing apparatus according to claim 8, wherein said memory means is constructed by an input FIFO and an output FIFO.

15. (withdrawn) An information processing apparatus according to claim 14, further comprising updating means for updating said set address information for DMA transfer.

16. (withdrawn) An information processing apparatus according to claim 15, wherein said updating means updates said address information for DMA transfer when the data amount of said packets stored in said input FIFO is equal to or larger than a predetermined capacity.

17. (withdrawn) An information processing apparatus according to claim 15, wherein said updating means updates said address information for DMA transfer when the data amount of said packets stored in said output FIFO is equal to or smaller than a predetermined capacity.

18. (withdrawn) An information processing apparatus according to claim 8, wherein said recording apparatus is a hard disk drive built in said information processing apparatus.

19. (currently amended) A digital broadcast receiving apparatus having a hard disk drive therein, comprising:
      receiving means for receiving a stream constructed by packets of a predetermined format under control of a control means;
      extracting means for extracting the packets ~~for recording to said hard disk drive~~ from the packets constructing said stream received by said receiving means;
      memory means for storing said packets for recording;
      memory control means for controlling writing ~~and reading~~ said packets ~~of~~ into said memory means, for controlling reading said packets from said memory means, ~~and~~ for issuing a command to prepare transferring before an amount of said packets stored

by said memory means reaches a full capacity, and for supplying a start address of said hard disk;

index adding means for adding an address of a sector of minimum unit of recording on said hard disk drive as index to said packets read out by said memory control means and for outputting said packets added said address to said hard disk;

arbiter for mediating said packets extracted by said extracting means storing said memory means, and for mediating said packets outputting from said memory means to said index adding means in response to an instruction from said memory control means; and

packets transferring control means for permitting write access of said packets outputted from index adding means to said recording means in accordance with said command from said memory control means, so that said packets are transferable for recording to said recording means from said index adding means without a control of said control means, wherein said packets transferring control means including address determining means for starting updating an address of said recording means when said start address is inputted from said memory control means by counting up said address of memory means each time transferring said packets of predetermined data amount.

20. (currently amended) A digital broadcast receiving apparatus according to claim 19,

said memory means includes an input FIFO, and

said transferring of said packets is made cluster by cluster, said cluster being of a predetermined data amount.

21-24. (canceled).

25. (withdrawn) A digital broadcast receiving apparatus having a hard disk drive therein, comprising:

receiving means for receiving a stream constructed by packets of a predetermined format;

extracting means for extracting the packets which are recorded into said hard disk drive from the packets constructing said stream received by said receiving means;

memory means for storing said packets extracted by said extracting means;

a command buffer for setting address information for DMA transfer; and

adding means for adding said set address information every predetermined data amount (block) of the packets read out from said memory means.

26. (withdrawn) A digital broadcast receiving apparatus, according to claim 25, wherein said adding means adds the address information including at least one of an address in said hard disk drive in which a just-previous block has been recorded, an address in said hard disk drive in which a current block is recorded, and an address in said hard disk drive in which a just-subsequent block is recorded to said block.

27. (withdrawn) A digital broadcast receiving apparatus, according to claim 25, further comprising updating means for updating said set address information for DMA transfer.

28. (withdrawn) A digital broadcast receiving apparatus according to claim 27, wherein said updating means has an internal counter for automatically setting said address information.

29. (withdrawn) A digital broadcast receiving apparatus according to claim 28, wherein as said address information, each time the DMA transfer of one block is finished, said internal

counter is counted up and the address information of one block
is set.

30. (withdrawn) A digital broadcast receiving apparatus
according to claim 27, wherein said updating means updates said
address information for DMA transfer when the data amount of
said packets stored by said memory means reaches a predetermined
capacity.

31. (withdrawn) A digital broadcast receiving apparatus
according to claim 25, wherein said memory means is constructed
by an input FIFO and an output FIFO.

32. (withdrawn) A digital broadcast receiving apparatus
according to claim 31, further comprising updating means for
updating said set address information for DMA transfer.

33. (withdrawn) A digital broadcast receiving apparatus
according to claim 32, wherein said updating means updates said
address information for DMA transfer when the data amount of
said packets stored in said input FIFO is equal to or larger
than a predetermined capacity.

34. (withdrawn) A digital broadcast receiving apparatus
according to claim 32, wherein said updating means updates said
address information for DMA transfer when the data amount of
said packets stored in said output FIFO is equal to or smaller
than a predetermined capacity.

35. (currently amended) An information processing method
comprising:
        receiving a stream constructed by packets of a
predetermined format under control of a control means;

extracting packets ~~for recording~~ from the packets
constructing said received stream;

using a memory means to store said packets for recording;

using a memory control means to control writing ~~and reading~~
of said packets ~~of~~ into said memory means, to control reading
said packets from said memory means, ~~and~~ to issue a command to
prepare transferring before an amount of said packets stored by
said memory means reaches a full capacity, and to supply a start
address of a recording device;

using an index adding means to add an address of a sector
of minimum unit of recording on a recording device as index to
said packets read out by said memory control means and to output
said packets added said address to said recording device;

using an arbiter to mediate said packets extracted by said
extracting means storing said memory means, and to mediate said
packets outputting from said memory means to said index adding
means in response to an instruction from said memory control
means; and

using a packets transferring control means to permit write
access of said packets outputted from said index adding means to
said recording device in accordance with said command from said
memory control means ~~, so that said packets are transferable for~~
~~recording to said recording device from said index adding means~~
~~without control of said control means~~, wherein said packets
transferring control means including address determining means
for starting updating an address of said recording means when
said start address is inputted from said memory control means by
counting up said address of memory means each time transferring
said packets of predetermined data amount.

36.   (withdrawn)   An information processing method comprising:

a receiving step of receiving a stream constructed by
packets of a predetermined format;

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an extracting step of extracting the packets which are recorded to a recording apparatus from the packets constructing said stream received by said receiving step;

a storing step of storing said packets extracted by said extracting step;

a setting step of setting address information for DMA transfer by a command buffer; and

an adding step of adding said set address information every predetermined data amount (block) of the packets read out from said memory means.

37.   (currently amended) A recording medium in which a computer-readable program has been recorded, wherein said program, when executed, comprises the steps of:

receiving a stream constructed by packets of a predetermined format under control of a control means;

extracting packets from the packets constructing said received stream;

using a memory means to store said packets for recording;

using a memory control means to control writing ~~and reading~~ of said stored packets, to control reading said stored packets, ~~and~~ to issue a command to prepare transferring before an amount of said stored packets reaches a full capacity, and to supply a start address of a recording device;

using an index adding means, adding an address of a sector of minimum unit of recording on a recording device as index to said packets read out by said memory control means and for outputting said packets added said address to said recording device;

using an arbiter to mediate said packets extracted by said extracting means storing said memory means, and to mediate said packets outputting from said memory means to said index adding

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means in response to an instruction from said memory control means; and

a packets transferring control means to permit write access of said packets outputted from said index adding means to said recording device in accordance with said command from said memory control means~~, so that said packets are transferable for recording to said recording device from said index adding means without control of said control means~~, wherein said packets transferring control means including address determining means for starting updating an address of said recording means when said start address is inputted from said memory control means by counting up said address of memory means each time transferring said packets of predetermined data amount.

38. (withdrawn) A recording medium in which a computer-readable program has been recorded, wherein said program comprises:

a receiving step of receiving a stream constructed by packets of a predetermined format;

an extracting step of extracting the packets which are recorded to a recording apparatus from the packets constructing said stream received by said receiving step;

a storing step of storing said packets extracted by said extracting step;

a setting step of setting address information for DMA transfer by a command buffer; and

an adding step of adding said set address information every predetermined data amount (block) of the packets read out from said memory means.

39. (canceled)

40. (canceled)

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~~39~~41. (currently amended) An information processing apparatus according to claim 2,

said input FIFO for sequentially storing said packets for recording and for outputting said packets in storing order~~, and said packets transferring control means supplies start address of said recording means~~.

~~40~~42. (canceled)

~~41~~43. (currently amended) A digital broadcasting receiving apparatus according to claim 20,

said input FIFO for sequentially storing said packets for recording and for outputting said packets in storing order~~, and said packets transferring control means supplies start address of said recording means~~.

~~42~~44. (canceled)

~~43~~45.   (currently amended) An information processing method according to claim 35,

said storing said packets for recording includes storing said packets into an input FIFO, and

said transferring of said packets is made cluster by cluster, said cluster being of a predetermined data amount.

~~44~~46. (currently amended) An information processing method according to claim ~~43~~45,

said input FIFO for sequentially storing said packets for recording and for outputting said packets in storing order~~, and said packets transferring control means supplies start address of said recording means~~.

~~45~~47. (canceled)

~~46~~48. (currently amended) A recording medium in which a computer-program readable program has been recorded according to claim 37,

storing said packets for recording includes storing said packets into an input FIFO, and

said transferring of said packets is made cluster by cluster, said cluster being of a predetermined data amount.

~~47~~49. (currently amended) A recording medium in which a computer-program readable program has been recorded according to claim ~~46~~48,

said input FIFO for sequentially storing said packets for recording and for outputting said packets in storing order~~, and said packets transferring control means supplies start address of said recording means~~.

~~48~~50. (canceled)

51. (new) An information processing apparatus according to claim 1, said packets transferring control means further including a register for comparison of address of memory, wherein in said register the maximum address of the memory in the recording means is set for automatically returning to the start address.